UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,336	03/13/2001	Kannan Srinivasan	696.003	1923

35195 7590 08/23/2007
FERENCE & ASSOCIATES LLC
409 BROAD STREET
PITTSBURGH, PA 15143

EXAMINER	
JANVIER, JEAN D	

ART UNIT	PAPER NUMBER
3622	

MAIL DATE	DELIVERY MODE
08/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/805,336	SRINIVASAN ET AL.	
	Examiner	Art Unit	
	Jean Janvier	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/30/07 has been entered and a Non-Final Action follows.

Detailed Action

Status of the claims

Claims 1-21 are currently pending in the Instant Application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson, US Patent 5, 918, 014 in view of Bibelnieks, US Patent 6, 567,786B1.

(In the present Action, "promotion" is treated as advertisement and vice versa as understood in the art).

As per claims 1-21, Robinson discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users **or visitors from a pool or a**

set/number of visitors visiting a website predefined by an advertiser (receiving configuration data from an advertiser indicating that the advertiser wants to target the visitors visiting a particular website based on some criteria and random sampling or randomly selecting a subset or a certain number of visitors, out of the set of visitors visiting the website, to be exposed to the advertiser's advertisements or experiments and to thereby determine the optimal advertisement or experiment based on the certain number or randomly selected visitors', from the visitors visiting the website, responses). During this "training period" for the new ad, **a certain percentage of the members of the subject's community will click on the new ad.** If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

Furthermore, for **each ad from a plurality of new ads submitted by an advertiser,** there will have to be a period when ACF (Automated Collaborative Filtering) techniques are not the sole determinant of which (optimal) ad is displayed. **Instead, such ads will be displayed either according to a fixed schedule or randomly**. Moreover, a particular embodiment of the present system could also choose to continually have a probability that the ad(s) shown to a user(s) at any given time might **be randomly chosen rather than selected by ACF techniques (here, the ads or experiments are selected from a plurality of ads and displayed to users or visitors (at random) when they visit particular web sites predetermined or chosen by an advertiser or merchant (or based on the merchant's configuration data)). There is a tradeoff when the ads are being randomly displayed or presented to the users (chosen at random). Indeed, the more ads are randomly presented, a) the more data the system will be able to collect for the ACF engine, thereby increasing the accuracy of the engine; and b) the more frequently users will be exposed to random ads that are not relevant to their interests. Here, the ACF engine, using the data compiled from the randomly displayed ads, will be able to determine one or more ads (one or more optimal ads) having received an unusually high proportion of click-throughs by the users (chosen at random), wherein the displayed ads are not based on the users' interests, but rather on the display web sites pre-selected by an advertiser or merchant (or based on the merchant's configuration data)** (Col. 19: 6-17; col. 5: 10 to col. 6: 42; col. 19: 18-33).

As per claims 1 and 18, Robinson does not expressly teach determining an optimal promotion that optimizes at least one economic variable or value.

However, Bibelnieks, the secondary reference, discloses a method of and system for increasing the efficiency of customer contact strategies. Customers are analyzed based upon historical criteria. A promotional plan (**a group of promotion events or specific events implemented or to be implemented over a particular time period**) is analyzed to determine the effect of each promotion event on the other promotion events in the promotional plan; **and, based on this analysis, the optimal promotion stream (a specific subset of the promotional plan to be sent to customers or a group of similar customers) is determined so as to maximize the ROI of the promotional plan as a whole (determining an optimal promotion that will maximize the ROI or economic variable)**. Here, the present system focuses on a particular customer or customer group (called a class), and their ROI (Return On Investment) value or economic value with respect to an entire set of promotion events proposed to be implemental over a period of time.

In short, Bibelnieks teaches a system for **presenting or displaying a plurality of promotions to a user and determining the effect of one promotion over another promotion or the cannibalization effect to thereby determine an optimal promotion, to be presented or displayed to a user, that will optimize or maximize an economic value or the ROI or return on investment with respect to the user.**

(Col. 2: 45-67; col. 4: 66 to col. 5: 67; col. 6: 37 to col. 7: 15).

Therefore, an ordinary skilled artisan would have been motivated at the time of the invention to incorporate the teachings of Bibelnieks into the Robinson 's system so as to select an optimal advertisement or optimal promotion, that will maximize the related ROI or economic

value, from a plurality of displayed advertisements or promotions (experiments), to be presented to at least one user or customer based on other users' or visitors' reaction to the displayed advertisements or promotions (experiments) and based upon the maximum return on investment or ROI (economic value) associated with the selected advertisement or optimal promotion (based on the user's ROI value or economic value with respect to the selected promotion or promotional plan or campaign) or the expected revenue for the selected promotion with respect to the user, thereby enabling a merchant or advertiser to control or minimize his liability/risk related to running a promotional plan or promotional campaign comprising a plurality of promotions (experiments) or a plurality of advertisements by sending to one or more users or customers an optimal promotion or advertisement, selected from the plurality of promotions or advertisements (experiments) offered or presented to a group of visitors (random visitors), that appeals to the user's interest or that is more likely to trigger a purchase, from the user or customer, of an item or service featured in the selected or sent promotion and wherein the customer's purchase will eventually contribute or increase the merchant's economic bottom line.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21 are rejected under 35 USC 102(e) as being anticipated by Lipsky, US Patent 7,031,932.

As per claims 1-21, Lipsky discloses a facility for adjusting the execution of an advertising campaign in which advertising messages (experiments) are presented to users using a plurality of advertising alternatives. During a first time period, the facility presents advertising messages using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives. Also during the first time period, the facility tracks the performance of the advertising campaign with respect to each of the advertising alternatives. Based upon the tracking during the first time period, the facility attributes a performance score to each of the advertising alternatives for the first time period. The facility compares these scores, and, based upon the comparison, adjusts the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives, which compare favorably in the comparison, and so as to reduce one or more allocations for advertising alternatives comparing disfavorably in the comparison. The facility then, during a second time period, presents advertising messages using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See abstract).

In an exemplary embodiment, reallocating between cost packages may involve negotiating with the publisher or other seller of a higher-performing cost package to increase the volume of the higher-performing cost package, as well as negotiating with the publisher or other seller of a lower-performing cost package to cancel or decrease the volume of the lower-performing cost package. Reallocating between the placements of a cost package may involve negotiating with the publisher or other seller of the cost package to increase the volume of the

higher-performing allocations of the cost package and decrease the volume of the lower-performing allocations of the cost package. **Reallocating between advertising messages presented in a placement may involve increasing the probability that higher performing advertising messages are served in response to an advertising message request for the placement and decreasing that probability for lower-performing advertising messages.** After adjusting these allocations in accordance with the effectiveness scores, the facility continues the campaign using these new allocations, again maintaining performance statistics in order to later perform further reallocations. It is herein understood that once one or more high performing (optimal) ads are determined, the facility should provide and/or present (display) the high performing (optimal) ads to the advertiser or merchant related to the high performing or optimal ads (Col. 2: 62 to col. 3: 15).

In general, Lipsky discloses a system that displays ads (experiments) to users and monitors the ads performance by tracking the users' responses to the displayed ads and adjusting the ads variables or parameters (reallocating step) to increase the users' responses or the ads performance, thereby determining one or more higher-performing (optimal) ads that will be presented to users in the future.

Further, Lipsky discloses a method of and a system for, in a computing device, adjusting the execution of an advertising campaign for presenting advertising messages/experiments to a plurality of users or (random website visitors), the advertising campaign, having a plurality of advertising alternatives for presenting advertising messages/experiments, comprising: during a first time period, presenting advertising messages/experiments to users among the plurality of users using each of the advertising alternatives in accordance with an initial allocation for each

of the advertising alternatives (presenting advertisements/experiments to a randomly selected subset of users from a number/plurality of users or website visitors who are to participate in the advertising campaign); tracking the performance of the advertising campaign with respect to each of the advertising alternatives (advertising messages) across the plurality of users; based upon the tracking during the first time period, attributing a performance score to each of the advertising alternatives for the first time period (measuring the effectiveness of each ad presented to the users by tracking the performance or the users' action...); comparing the scores attributed to the advertising alternatives for the first time period, wherein the comparison is performed using confidence intervals about the performance scores; based upon the comparison, adjusting the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives comparing favorably in the comparison and so as to reduce one or more allocations for advertising alternatives comparing disfavorably in the comparison (determining based on the above comparison, the optimal experiments/advertisements, which maximize the advertisers' return on investment or are more suitable to be displayed to the users (the rest of the users from the plurality of random users)); and during a second time period, presenting advertising messages to users among the plurality using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See claim 3 of the present reference; fig. 2).

Finally, Lipsky teaches a system for presenting advertising messages in a group of advertising messages to a plurality of random users (random website visitors), comprising: during an evaluation period, presenting the advertising messages to a randomly selected subset of users from the plurality of users/website visitors who are to participate in an advertising

campaign; assessing the effectiveness of presenting each of the advertising messages or experiments during the evaluation period across the plurality of users (measuring the effectiveness of each presented advertisement or experiment); assigning presentation weights to the presented advertising messages of the group in accordance with their assessed effectiveness; and during a weighted presentation period, presenting to users among the plurality of users the advertising messages of the group with relative frequencies that are in accordance with their weights (determining one or more optimal advertisements/experiments based on the weighting...) (See claim 5 of the reference; figs. 3-5).

Response To Applicant's Arguments

First of all, contrary to the Applicant's remarks, Lipsky does not teach away from the claimed invention. Indeed, Lipsky discloses, inter alia, a method of and a system for, in a computing device, adjusting the execution of an advertising campaign for presenting advertising messages/experiments to a plurality of users or (random website visitors), the advertising campaign, having a plurality of advertising alternatives for presenting advertising messages/experiments, comprising: during a first time period, presenting advertising messages/experiments to users among the plurality of users using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives (presenting advertisements/experiments to a randomly selected subset of users from a number/plurality of users or website visitors who are to participate in the advertising campaign); tracking the performance of the advertising campaign with respect to each of the advertising alternatives (advertising messages) across the plurality of users; based upon the tracking during the first time period, attributing a performance score to each of the advertising alternatives for

the first time period (measuring the effectiveness of each ad presented to the users by tracking the performance or the users' action...); comparing the scores attributed to the advertising alternatives for the first time period, wherein the comparison is performed using confidence intervals about the performance scores; based upon the comparison, adjusting the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives comparing favorably in the comparison and so as to reduce one or more allocations for advertising alternatives comparing disfavorably in the comparison (determining based on the above comparison, the optimal experiments/advertisements, which maximize the advertisers' return on investment or are more suitable to be displayed to the users (the rest of the users from the plurality of random users)); and during a second time period, presenting advertising messages to users among the plurality using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See claim 3 of the present reference; fig. 2).

In addition, Lipsky teaches a system for presenting advertising messages in a group of advertising messages to a plurality of random users (random website visitors), comprising: during an evaluation period, presenting the advertising messages to a randomly selected subset of users from the plurality of users/website visitors who are to participate in an advertising campaign; assessing the effectiveness of presenting each of the advertising messages or experiments during the evaluation period across the plurality of users (measuring the effectiveness of each presented advertisement or experiment); assigning presentation weights to the presented advertising messages of the group in accordance with their assessed effectiveness; and during a weighted presentation period, presenting to users among the plurality of users the

advertising messages of the group with relative frequencies that are in accordance with their weights (determining one or more optimal advertisements/experiments based on the weighting...) (See claim 5 of the reference; figs. 3-5).

Here, even if two web sites were used to conduct the advertising campaign, the ads would be presented in the same manner to random visitors to the sites and the determination of an optimal ad or experiment would be conducted in a similar fashion. Further, the claimed invention is not limited to a single or unique web site.

Second of all, contrary to the Applicant's findings, Robinson does not teach away from the claimed invention since both systems are configured to display advertisements (experiments or promotions) to random visitors of a website and to determine therefrom the optimal promotion based on the random visitors' responses to the displayed ads or promotions. Further, although the present claimed invention does not specifically recite using the visitors' profile, however, that does not expressly exclude the use of some kind of profiling. In fact, the advertiser has to employ some kind of measurement with respect to the type of visitors he wants to target; otherwise, the advertising may end up sending inappropriate promotions or promotional materials to minors (e.g. sending a car ad to a minor). In addition, selecting by the advertiser the website where the ads should be displayed is a form of targeting. Moreover, the notion that the optimal experiment is determined in real-time appears to be more complicated than the Applicant may have anticipated. In practice, collecting responses to displayed ads from a sample of 6,000.00-10,000.00 visitors, for example, to thereby determine an optimal promotion/experiment/ad may take minutes, hours or even days.

Additionally, despite its relevance, the Bibelnieks' patent was used for the return on investment (ROI) disclosure related to running by an advertiser a plurality of promotions. Thus, contrary to the Applicant's contention, Robinson and Bibelnieks are not in direct contrast with each other and hence, the obviousness rejection is deemed proper and in accordance the MPEP.

Therefore, the Applicant's request for allowance and withdraw of the last Office Action have been carefully considered and respectfully denied since the Applicant's arguments are not persuasive.

Conclusion

Although the following references were not used in the Office Action, they were highly considered by the Examiner. Applicants are further directed to consult these references.

USP 6,286,005B1 to Cannon discloses a computer-based decision support system that includes three main components: a database mining engine (DME); an advertising optimization mechanism; and a customized user interface that provides access to the various features of the invention. The user interface, in conjunction with the DME, provides a unique and innovative way to store, retrieve and manipulate data from existing databases containing media-related audience access data, which describe the access habits and preferences of the media audience. By using a database with a simplified storage and retrieval protocol, the data contained therein can be effectively manipulated in real time. This means that previously complex and lengthy information retrieval and analysis activities can be accomplished in very short periods of time (typically seconds instead of minutes or even hours). Further, by utilizing the advertising optimization mechanism of the present invention, businesses, networks, and advertising agencies can interactively create,

score, rank and compare various proposed or actual advertising strategies in a simple and efficient manner. This allows the decision-makers to more effectively tailor their marketing efforts and successfully reach the desired target market while conserving scarce advertising capital. Finally, the user interface for the system provides access to both the DME and the optimization mechanism in a simple and straightforward manner, significantly reducing training time (See abstract).

US Patent 6, 338, 066 to Martin discloses a log of previous web-surfer behavior listing the order in which each surfer downloaded specific items at the web site, and given a meaningful classification of those same items, future surfer behavior is predicted by the present invention. The algorithm utilizes a quantitative model relating items downloaded prior to some specified event to items downloaded after that same event. When the model is applied to a new surfer's session prior to an analogous event, the present invention predicts the likely behavior of the surfer subsequent to that event. The predicted behavior is then further analyzed to derive a quantitative value for the utility of the expected behavior. By randomly selecting sample sessions from a web log, multiple models of surfer behavior can be generated. The multiple models can then be applied to a new surfer's session to produce a predicted behavior/utility distribution and thus a confidence interval for the predicted behavior/utility (See abstract).

US Patent 6, 356,879 to Aggarwal discloses a system for deriving product characterizations for products offered at an e-commerce site based on the text descriptions of the products provided at the site. A customer characterization is generated for any customer browsing the e-commerce site. The characterizations include an aggregation of derived product characterizations associated with products bought and/or browsed by that customer. A peer

group is formed by clustering customers having similar customer characterizations. Recommendations are then made to a customer based on the processed characterization and peer group data (See abstract).

US Patent 6, 430, 539 to Lazarus discloses a predictive modeling of consumer financial behavior is provided by application of consumer transaction data to predictive models associated with merchant segments. Merchant segments are derived from consumer transaction data based on co-occurrences of merchants in sequences of transactions. Merchant vectors representing specific merchants are clustered to form merchant segments in a vector space as a function of the degree to which merchants co-occur more or less frequently than expected. Each merchant segment is trained using consumer transaction data in selected past time periods to predict spending in subsequent time periods for a consumer based on previous spending by the consumer. Consumer profiles describe summary statistics of consumer spending in and across merchant segments. Analysis of consumers associated with a segment identifies selected consumers according to predicted spending in the segment or other criteria, and the targeting of promotional offers specific to the segment and its merchants (See abstract).

US Patent 6,925,441B1 to Jones discloses a system and method of presenting targeted marketing to consumers, including businesses and associates, based upon the financial characteristics of the consumer, type offer being made and the channel of communication for delivery of the offer. The consumer is characterized based upon financial, behavioral, and socioeconomic factors. The offer is characterized based upon the consumer and the potential for the consumer accepting the offer. The channel of communication for delivery of the offer is also characterized and combined with the consumer and consumer-offer characteristics to arrive at a

net present value of the offer to be made. If the net present value is sufficient the offer is processed and presented to the consumer. If the net present value is not sufficient, the offer is revised to present a better value to the consumer (or discarded if the required offer value can not be created) thereby enhancing the chances that the consumer will accept the offer in question. In this way the system and method of the target marketing creates value in both releasing, and not releasing, specific offers (See abstract).

Any inquiry concerning this communication from the Examiner should be directed to Jean D. Janvier, whose telephone number is (571) 272-6719. The aforementioned can normally be reached Monday-Thursday from 10:00AM to 6:00 PM EST. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Eric W. Stamber, can be reached at (571) 272- 6724.

Non-Official- 571-273-6719.

Official Draft : 571-273-8300

08/17/07

JDJ

Jean D. Janvier

Patent Examiner

Art Unit 3622

JEAN D. JANVIER
PRIMARY EXAMINER

Janvier Jean Dario